

SUMMARY

Solid Waste Site Suitability Rule Revision

December 13, 2005

1:00 p.m.

Division of Geology and Land Survey

111 Fairgrounds Road

Annex Conference Room

Rolla, MO

In Attendance:

Rod Bloese, Genesis Solid Waste Group

Bill Upmon, Waste Management of Missouri

Darleen Groner, Hazardous Waste Program, DNR

Leanne Tippet-Mosby, DNR

Jim Hull, Solid Waste Management Program, DNR

Doug Doerr, Aquaterra of Kansas City

Tom Aley, Ozark Underground Lab

Peter Price, Division of Geology and Land Survey, DNR

Gary Pendergrass, Springfield City Utilities

Dave Coonrod, Greene County Commission

Keith Wenzel, Hendren and Andrae

Belinda Harris, Representative, 110th District

Denny Dennison, Waste Management

John Bogner, American Institute of Professional Geologists & Leggette, Brashears and Graham

Tom Gredell, Gredell Engineering, American Council of Engineering Companies of MO

Mike Carlson, Gredell Engineering, American Council of Engineering Companies of MO

Chris Landoll, Waste Corporation of Missouri

Paul Pike, AmerenUE

Jim Froelker, DNR Ombudsman

Joe Gillman, Division of Geology and Land Survey, DNR

Bill Duley, Division of Geology and Land Survey, DNR

Steve Rudloff, Missouri Limestone Producers Association

Bud Hayes, Kaysinger Basin Regional Planning Commission

Mark Russell, Shaw Environmental, Inc.

Mimi Garstang, Division of Geology and Land Survey, DNR

Summary of Comments
**Solid Waste Site Suitability Stakeholders Group Meeting
December 13, 2005**

1. What makes a detailed site investigation inadequate?

A DSI is inadequate unless and until it characterizes a site sufficiently for DGLS to determine whether the site is geologically or hydrologically suitable or unsuitable and provides sufficient information to design a disposal cell and an effective groundwater monitoring system.

2. Should we describe minimum requirements of a Workplan in a way to distinguish from the minimum requirements of a Detailed Site Investigation?

This is already included in Appendix 1. The workplan is simply a plan to complete the detailed site investigation and does not need to be a complex document as long as the elements of a DSI are all addressed.

3. Should the words “will” or “shall” or “may” be substituted at various places in the rule?

“Will” and “shall” are generally interchangeable in rule language. “May” should only be used in cases where multiple options are available. DNR legal council will review for proper useage of these terms before the rule is posted for general comments.

4. “Negatively impact groundwater monitoring” needs to be defined.

The department has eliminated the term.

5. Is the karst terrane paragraph needed?

The department believes that the inherent dangers of karst terrane should be reinforced. Nevertheless, this paragraph has been reworded.

6. Should the term “site” be used in lieu of “proposed disposal area”?

The department agrees and the text has been revised.

7. If a site is well-suited for a solid waste disposal area, the incentive should be a given.

The department agrees and the text has been revised.

8. Pump tests should be required when appropriate with slug tests used only when necessary.

The department agrees and the text has been revised.

9. The terms “geologic unit” and “stratigraphic unit” should be replaced with the term “hydrostratigraphic unit”.

The department agrees and the text has been revised.

10. Should the rule require three or five continuously sampled borings?

The department believes that the minimum number of continuously sampled borings should be five. Three does not provide adequate information concerning joint patterns and the distribution and characteristics of hydrostratigraphic units at a given site.

11. The term “bed” is not as appropriate as “unit” when discussing hydrologic impacts.

The department agrees and the text has been revised.

12. The term “hydrostratigraphic unit” needs to be defined by the appropriate testing method.

The term, as defined, is broad and includes confining units, aquifers and even other types of bedrock and surficial material units which may be characterized by a variety of methods. Appropriate test methods should be discussed and approved through the workplan process to assure that adequate information is collected while maintaining flexibility for each specific condition.

13. The term “applicant” should be replaced with “owner/operator”.

Both terms are already defined independently and should be retained.

14. The term “water bearing unit” should be changed to “water bearing hydrostratigraphic unit”.

The department agrees and the text has been revised.

15. Standard penetration tests should not be required unless appropriate as defined in the workplan.

The department agrees and the text has been revised.

16. Where should the issue of rare, threatened and endangered be considered?

This issue would be addressed should any Corps of Engineers 404 permit be required.

17. It was suggested that issues that are not geologic or hydrologic in nature should not be part of the DGLS site approval or disapproval process.

The department agrees and the text has been revised.

18. Does Appendix 1 need a disclaimer?

Yes. Language will be drafted for a disclaimer.

19. The term “unstable area” needs to be added to the list of site criteria needed to be evaluated.

The department agrees and the text has been revised.

Utility Waste Discussion

1. Are there statistically significant increases in water quality parameters in downgradient monitoring wells at existing utility waste landfills?

The department is gathering information to determine the answer to this question.

2. Should a demonstration be required before allowing the siting of a utility waste landfill in physical settings that would be denied for other types of waste disposal?

The department, after stakeholder discussions, believes that siting restrictions for utility waste landfills should not be as stringent as other types of landfills. The department position is that disposal of utility waste that is consistent and relatively innocuous, is not a significant threat to public health or the environment unless a fault with Holocene movement is present on-site, there is significant collapse potential or the disposal area cannot be adequately monitored. Recent faulting within a landfill disposal area in Missouri is essentially non-existent. The only documented Holocene faults in Missouri do not display an offset at the surface. Since the other limiting conditions normally occur only in karst settings and are not readily modeled or demonstrated in the field, a demonstration would prove to be of little value.

3. Should utility waste be exempt from the fatal flaw list?

A general consensus of the stakeholders was that fewer siting restrictions should be required for utility waste landfills. The rule has been revised to reflect this concern.

4. Groundwater monitoring is the key to utility waste disposal in a karst setting.

The department agrees with this comment. However, if collapse potential is significant or conduit flow is present in karst terrane there is concern about rapid movement of the waste material itself into surrounding groundwater supplies. Groundwater monitoring in karst terrane is extremely difficult and adds to the problem of protecting the public and the environment.

5. We should consider cement kiln dust and lime kiln dust in the regulatory process as well.

The department, after stakeholder discussions, has not incorporated cement kiln dust and lime kiln dust in the proposed rulemaking. If information regarding cement kiln dust and/or lime kiln dust is submitted during the public comment period, the department could take these items into consideration.